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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

tion of

Applicants : Dalmais et al.
Serial No. : 10/684,787
Filed : October 14, 2003
Title : PRINTING BLANKET AND METHOD FOR REDUCING CORROSION AND ABRASION OF PRINTING BLANKETS AND BLANKET CYLINDERS
Docket No. : DAY 0766 PA
Art Unit : 1773
Confirm. No. : 2991
Examiner : Kevin R. Kruer

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on September 18, 2006.

Susan M. Luna
Agent Reg. No. 38,769

Sir:

BRIEF ON APPEAL

This is an appeal from the Office Action mailed May 19, 2006, finally rejecting claims 2, 4-9, 21 and 22 in the application. A Notice of Appeal was timely filed on July 28, 2006, with the accompanying fee. Our check in the amount of $500 accompanies this Brief in accordance with 37 CFR §41.20(b)(2).

Real Party in Interest

The real party in interest in this application is Day International, Inc., by an assignment from the named inventors recorded in the files of the U.S. Patent and Trademark Office at Reel 014848, Frame 0609.

Related Appeals and Interferences

Applicants know of no currently pending related appeals or interferences that would have an effect on the outcome of this appeal.

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Status of Claims

Claims 2, 4-9, 21 and 22 are pending in this application and are before this Board for consideration on appeal. Claims 1, 3 and 10-20 are cancelled. A copy of the appealed claims is found in the Appendix attached to this brief.

Status of Amendments

No amendments to the claims were filed after final rejection. All previous amendments have been entered.

Summary of Claimed Subject Matter

The present invention is directed to a metal-backed printing blanket which includes a protective polymeric film on the metal base ply. The protective film functions to inhibit corrosion of the metal backing of the printing blanket as well as the blanket cylinder surface caused by the accumulation of moisture between the printing blanket and cylinder surface which occurs during printing. The protective polymeric film also functions to reduce abrasion of the printing cylinder caused by the build-up of friction which occurs between the metal backing of the printing blanket and the cylinder surface during printing.

Concise explanation of the Subject Matter Defined in Independent Claim 22 and dependent claims 2 and 4-9

Referring to Fig. 1 and as described at page 5 of the specification, in one embodiment of the invention, a printing blanket construction 10 for reducing corrosion and abrasion of printing blankets and printing cylinders includes includes a metal base ply 12 having first and second surfaces 24 and 26, and a printable surface ply 22 on the first surface 24 of the base ply, where the second surface 26 of the base ply is adapted to contact a printing blanket cylinder. A protective polymer in the form of a film or sheet layer 14 is adhered to the second surface 26 of the base ply 12. As shown in Fig. 1 and as described in the specification at page 3, lines 10-11, the polymer extends over substantially the entire second surface of the base ply.

As shown in Fig. 1 and as described at pages 3 and 5 of the specification, the blanket may further include a compressible layer 18 positioned between the base ply and surface layer, a reinforcing ply 20 positioned between the compressible layer and surface layer, and a reinforcing ply 16 positioned between the compressible layer and base layer.

The polymeric film layer has a thickness of from about 0.0013 cm to about 0.51 cm, and may comprise ethylene vinyl acetate copolymers, nylon, polyester, polyurethane, and polyethylene. The film layer is adhered to the second surface of the base ply with an adhesive (not shown).

As described in the specification at page 6, in one embodiment, the polymeric film layer 14 includes corrosion inhibitors therein which are released when the blanket is compressed during a printing operation.

Concise explanation of the Subject Matter Defined in Independent Claim 21

As described in the specification at page 6 and as shown in Fig. 2, in one embodiment of the invention, the protective polymeric film is in the form of a multi-layer laminate comprising two or more polymer layers 14 which include a separate polymeric film layer 28 therebetween. The separate film layer 28 may incorporate corrosion-inhibiting additives.

Grounds of Rejection to be Reviewed on Appeal

The single ground of rejection for review on appeal is:

1) Claims 2, 4-9, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bresson et al, U.S. Patent No. 5,352,507 in view of Linska, U.S. Patent No. 4,766,811 and WO 93/01003 ("Pinkston").

Grouping of Claims

The Examiner has made one ground of rejection, rejecting claims 2, 4-9, 21 and 22 under 35 U.S.C. 103(a) as being unpatentable over Bresson et al, U.S. Patent No. 5,352,507 in view of Linska, U.S. Patent No. 4,766,811 and WO 93/01003 ("Pinkston"). The application contains two rejected independent claims, namely, claims 21 and 22. Applicants submit that the claims do not stand or fall together. The patentability of claims 21 and 22 will be separately argued.

Argument

Rejection under 35 U.S.C. 103(a) as being unpatentable over Bresson et al, U.S. Patent No. 5,352,507 in view of Linska, U.S. Patent No. 4,766,811 and WO 93/01003 ("Pinkston").

Claim 21

Claim 21 recites, inter alia, a protective polymeric film for use on the surface of a metal base ply of a printing blanket which contacts a printing blanket cylinder, where the polymer is in the form of a multi-layer laminate comprising two or more polymer layers including at least one non-permeable polymeric film layer therebetween containing corrosion-inhibiting additives.

Bresson et al. (US 5,352,507) teach a seamless multi-layer printing blanket which includes a printing surface layer 6, an elastomer layer 5, and a compressible layer 4. The Examiner refers to Fig. 3 of Bresson, which illustrates the blanket adhered to a metal carrier layer 10 which is then adhered to a printing cylinder 1 with an optional adhesive 3 (see col. 5, lines 59-61). The Examiner concludes that this construction meets the construction recited in applicants' claim 21 with the exception that "Bresson does not teach that the urethane adhesive layer may comprise a corrosion-inhibiting additive."

Applicants first wish to point out that Bresson does not teach or suggest a protective polymeric film for use on the surface of the metal base ply of a printing blanket construction as claimed. Rather, Bresson teach a blanket construction 2 which comprises a surface layer 6, an elastomer layer 5, and a compressible layer 4, none of which constitutes a metal base ply. The Examiner has interpreted metal carrier layer 10 as part of Bresson's blanket construction, but this is clearly not the case (see Bresson Fig. 3). The metal carrier layer 10 is separate from Bresson's blanket construction.

Further, while the Examiner maintains that the "optional" adhesive 3 of Bresson reads on the protective polymeric film limitation of claim 21 because it may comprise a "urethane" adhesive, applicants submit that there is no teaching or suggestion in Bresson that such an optional adhesive layer would function as a protective polymer film for the purpose of reducing corrosion and abrasion of printing blankets and cylinders.

The Examiner then goes on to cite Linska (U.S. 4,766,811) which teaches the use of a double-sided coated adhesive foil (2) applied to a cover plate on a printing cylinder to prevent corrosion of the cylinder surface. The Examiner asserts that it would have been obvious to replace the optional adhesive layer 3 of Bresson with the adhesive-coated foil taught in Linska in order to "increase the corrosion resistance of the metal cylinder." However, there is no motivation for one skilled in the art to make the proposed substitution as Bresson does not teach or suggest any desire to prevent corrosion and abrasion of a printing cylinder.

Further, Linska does not teach or suggest applying his adhesive foil to a metal base ply of a printing blanket construction, but rather applies his foil (2) to a cover plate (1) on a printing cylinder. Nowhere does Linska teach that his cover plate functions as a printing blanket. Nor is there any teaching or suggestion in Linska that his outer adhesive layers function as protective polymeric layers as taught and claimed by applicants.

Even if one were to make the proposed substitution, claim 21 would still not be met as Linska does not teach a polymeric layer comprising corrosion-inhibiting additives as acknowledged by the Examiner at page 3 of the final rejection. Rather, Linska teaches a foil comprised of stainless steel.

The Examiner has thus further cited Pinkston WO 93/01003, which teaches a printing blanket construction for reducing corrosion of printing blanket cylinders in which a layer of metal or an elastomer layer containing metal particles is deposited on the base layer of a printing blanket, where the metal acts as a sacrificial anode to electrochemically protect the metal on the blanket cylinder from corrosion. The Examiner asserts that it would have been obvious to use the elastomer layer containing metal particles as taught by Pinkston in place of the metal foil taught by Linska because "the layers are known to be equivalent for providing corrosion resistance to printing cylinders."

The Examiner has failed to provide the requisite evidence needed for combining the reference teachings. Pinkston is not directed to a protective film used to reduce corrosion and abrasion of a printing blanket having a metal base ply, but rather is concerned only with reducing corrosion of a blanket *cylinder* positioned beneath the blanket. Nor does Pinkston teach a printing blanket construction having a metal base ply, but rather teaches a blanket construction comprising a fabric or elastomer base ply which is then provided with a metal layer or layer containing metal particles in order to provide corrosion resistance to the underlying cylinder.

As such, there is simply no motivation to substitute Bresson's adhesive layer with the adhesive-coated foil of Linska, and in turn, to substitute the foil layer of Linska's structure with the sacrificial elastomer/metal particle layer of Pinkston. Nor is there any expectation of success if one were to substitute the metal particle containing layer of Pinkston for the foil layer of Linska. The Examiner asserted at page 5 of the final rejection that "It is not necessarily [sic] that the prior art suggest the combination to achieve the same advantage or result discovered by applicant." However, there must be some suggestion in the prior art to make the proposed modifications. Here, there is none. This is a classic case of hindsight reconstruction.

Claim 21 is patentable over the cited references as they do not teach or suggest, either alone or in combination, a multi-layer protective polymer film laminate for use on the metal base ply of a printing blanket which comprises two or more polymers with a polymer film therebetween which contains corrosion-inhibiting additives as claimed.

Claim 22 (as representative of claims 2, 4-9, and 22)

Claim 22 recites, inter alia, a printing blanket for reducing corrosion and abrasion of printing blankets and blanket cylinders comprising at least one base ply comprised of metal, a printable surface layer on the first surface of the base ply, and a protective polymer in the form of a film or sheet which is adhered to the second surface of the base ply with an adhesive, where the polymer has a thickness of at least 0.0013 cm.

With regard to claim 22, the Examiner has interpreted Bresson's metal carrier 10 as reading on applicants' "base ply," the (substituted) metal particle containing layer of Pinkston as reading on the claimed "polymer in the form of a film or sheet" and the adhesive between the base layer and the foil (Linska) as reading on the adhesive which is "adhered to the second surface of the base ply."

However, as applicants previously pointed out, there is no motivation to combine the teachings of the references in the manner proposed by the Examiner as none of the cited references teach a printing blanket having a metal base ply as claimed. Thus, there is no motivation to substitute Bresson's optional adhesive layer with the adhesive-coated foil of Linska, and in turn, to substitute the foil layer of Linska's structure with the sacrificial elastomer/metal particle layer of Pinkston. Even if all of the Examiner's proposed substitutions were made, the claims would still not be met as the substitution of Linska's adhesive coated foil and the elastomer/metal particle layer of Pinkston for the adhesive 3 of Bresson would not constitute a protective polymer film adhered to the second surface of a metal base ply with an adhesive as claimed.

With regard to the claimed thickness of the claimed protective polymer, the Examiner has taken the position that because Pinkston teaches an elastomeric layer containing metal particles having a diameter of from between 1-50 microns, the use of such a layer would meet the claimed polymer thickness of at least 0.0013 cm. However, as applicants previously pointed out, in the embodiment of Pinkston in which the elastomer coating containing metal particles is applied to the base ply, the coating is impregnated into the (fabric) base ply (see Fig. 4), and the base ply containing the coating is ground after coating to expose the metal particles in the coating. While the Examiner has taken the position that "there is nothing in Pinkston that suggests the particles themselves are ground," there is no teaching in Pinkston which suggests that the claimed thickness would be met by Pinkston's ground base ply. Rather, the evidence of record (as opposed to the Examiner's unsupported speculation) is that Pinkston has no separately identifiable polymer coating because such is impregnated into the base ply.

Further, as previously pointed out, there is no motivation to use either the metal particle-containing elastomer layer of Pinkston or the adhesive-coated metal foil layer of Linska in Bresson. Neither Linska nor Pinkston teach or suggest that corrosion protection can be achieved with the use of a protective polymeric film as claimed. Rather, both references teach corrosion protection provided by a metal layer or a sacrificial metal particle-containing layer.

The Examiner has relied on hindsight reconstruction in an attempt to meet applicants' claims. The Examiner continues to ignore the fact that Bresson neither recognizes nor offers a solution to the problem of corrosion of metal-backed printing blankets and printing cylinders. There is no motivation to substitute Bresson's optional adhesive layer with the adhesive-coated foil of Linska and then to further substitute the foil layer of Linska with the sacrificial metal particle-containing base layer of Pinkston. Even if one were to make the proposed substitutions, the claimed blanket construction would not result. None of the references, taken together or separately, teach or suggest a printing blanket having a **metal** base ply and a **protective polymer having a thickness of at least 0.0013 cm** adhered to the second surface of the base ply with an adhesive for the purpose of reducing corrosion and abrasion of the printing blanket as well as a blanket cylinder.

Conclusion

The Examiner has failed to carry his evidentiary burden of establishing a prima facie case of obviousness as to all of the claims on appeal. And, even if the reference teachings were to be combined in the manner proposed by the Examiner, the claimed invention would not result. The Board is requested to reverse the rejections of claims 2, 4-9, 21 and 22 in their entirety.

Respectfully submitted,

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APPENDIX

The Claims on Appeal

2. The printing blanket of claim 22 wherein said polymer is selected from the group consisting of ethylene vinyl acetate copolymers, nylon polyester, polyurethane, and polyethylene.

4. The printing blanket of claim 22 including an intermediate compressible layer positioned between said base ply and said surface layer.

5. The printing blanket of claim 4 including a reinforcing ply positioned between said compressible layer and said surface layer.

6. The printing blanket of claim of claim 4 including a reinforcing ply positioned between said base ply and said compressible layer.

7. The printing blanket of claim 22 wherein said polymer extends over substantially the entire second surface of said base ply.

8. The printing blanket of claim 22 wherein said polymer includes corrosion inhibiting additives therein and/or thereon.

9. The printing blanket of claim 22 wherein said polymer is in the form of a multi-layer laminate including at least one corrosion inhibiting film layer.

21. A protective polymeric film for use on the surface of a metal base ply of a printing blanket which contacts a printing blanket cylinder, wherein said polymer is in the form of a multi-layer laminate comprising two or more polymer layers including at least one corrosion-inhibiting, non-permeable polymeric film layer therebetween, said corrosion-inhibiting polymeric film layer containing corrosion inhibiting additives.

22. A printing blanket for reducing corrosion and abrasion of printing blankets and blanket cylinders comprising at least one base ply comprised of metal having first and second major surfaces, a printable surface layer on said first surface of said base ply, and a protective polymer in the form of a film or sheet which is adhered to the second surface of said base ply with an adhesive for reducing corrosion of said base ply, said polymer having a thickness of at least 0.0013 cm.

EVIDENCE APPENDIX

NONE

RELATED PROCEEDINGS APPENDIX

NONE

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Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 500.00

Complete if Known	
Application Number	10/684,787
Filing Date	October 14, 2003
First Named Inventor	Dalmias et al.
Examiner Name	Kevin R. Kruer
Art Unit	1773
Attorney Docket No.	DAY 0766 PA/40195.733

METHOD OF PAYMENT (check all that apply)

☐ Check ☑ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): ____________

☐ Deposit Account Deposit Account Number: ____________ Deposit Account Name: ____________

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☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, **except for the filing fee**

☐ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☐ Credit any overpayments

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

	FILING FEES		SEARCH FEES		EXAMINATION FEES		
Application Type	**Fee ($)**	**Small Entity Fee ($)**	**Fee ($)**	**Small Entity Fee ($)**	**Fee ($)**	**Small Entity Fee ($)**	**Fees Paid ($)**
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	**Fee ($)**	**Small Entity Fee ($)**
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims **Extra Claims** **Fee ($)** **Fee Paid ($)**
______ - 20 or HP = ______ x ______ = ______
HP = highest number of total claims paid for, if greater than 20

Indep. Claims **Extra Claims** **Fee ($)** **Fee Paid ($)**
______ - 3 or HP = ______ x ______ = ______
HP = highest number of independent claims paid for, if greater than 3

Multiple Dependent Claims
Fee ($) ______ **Fee Paid ($)** ______

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets **Extra Sheets** **Number of each additional 50 or fraction thereof** **Fee ($)** **Fee Paid ($)**
______ - 100 = ______ / 50 = ______ (round **up** to a whole number) x ______ = ______

4. OTHER FEE(S) **Fees Paid ($)**

Non-English Specification, $130 fee (no small entity discount) ______

Other: Filing of Brief on Appeal $500.00

SUBMITTED BY

Signature	Susan M. Luna	Registration No. (Attorney/Agent) 38,769	Telephone (937) 449-6400
Name (Print/Type)	Susan M. Luna/Patent Agent		Date September 18, 2006

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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